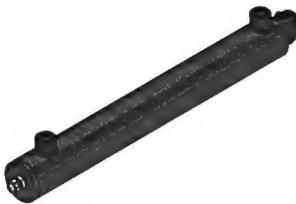


-3 HYDRAULIC CYLINDER

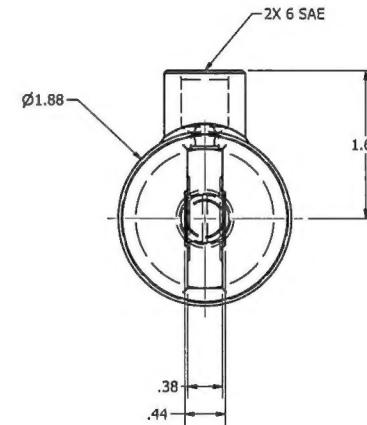
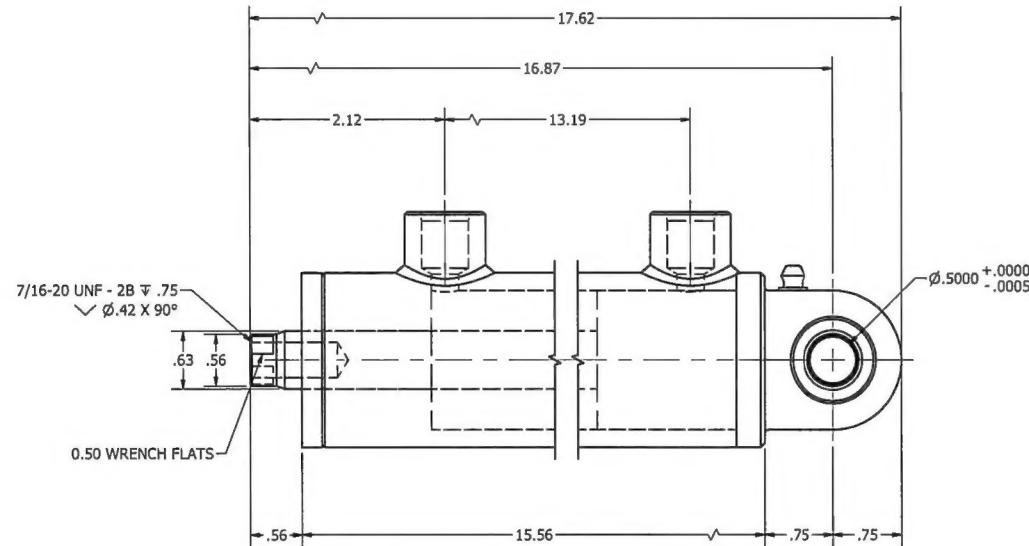
ACCEPTED VENDORS:
 MOTION FLOW CONTROL PRODUCTS, INC.
 834 S.E. FRONTAGE ROAD
 FORT COLLINS, CO 80524
 970.221.8008



MANUFACTURER:
 PARKER HANNIFIN CORP.
 CYLINDER DIVISION
 DES PLAINES, IL 60016

NOTES

1. MFG P/N: 1.50SBRDHBT419A12.000
2. BORE: 1.5 IN
3. STROKE: 12.0 IN
4. NOMINAL PRESSURE: 3000 PSI
5. SEALS: LOW TEMPERATURE (CLASS 4), -45°C (-50°F) TO 65°C (150°F) WITH ROD WIPER
6. MATERIALS: BODY - CARBON STEEL
 ROD - CARBON STEEL, CASE HARDENED AND HARD CHROME PLATED
 HEAD - DUCTILE IRON
 PISTON - DUCTILE IRON
6. FINISH: GLOSS BLACK ENAMEL



NOTE:

This drawing defines the overall geometry and performance specifications of the part/assembly, and constitutes the acceptance criteria thereof. Only the item(s) described in this document procured from the vendor and/or manufacturer listed hereon are approved for use. A substitute item shall not be used without prior approval. Conformance of hardware to these requirements is acceptable in lieu of vendor and/or manufacturer documentation.

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PROTO

Paravion[®] Inc.
 Technology

TITLE		DRAWING NUMBER	
HYDRAULIC CYLINDER		ES39212	

DIMENSIONS IN INCHES
 TOLERANCES EXCEPT
 WHERE NOTED:
 .X = $\pm .1$
 .XX = $\pm .05$
 .XXX = $\pm .010$
 ANGLES = $\pm 1^\circ$

THREADS:
 INTERNAL: CLASS 2A
 EXTERNAL: CLASS 2A

DRAWN BY	CHK'D BY	APRVD BY	DATE	REV	ECO
EW	LS	JT	8/8/17	C	

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3RD ANGLE PROJECTION

SHEET
 2 OF 2